

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

Paper No. 13

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte ABRAHAM DOMB,
ROBERT S. LANGER, ERNEST G. CRAVALHO,
GERSHON GOLOMB, EDITH MATHIOWITZ
and CATO T. LAURENCIN

Appeal No. 1997-2874
Application 08/219,160

ON BRIEF

Before WINTERS, WILLIAM F. SMITH, and ROBINSON, Administrative Patent Judges.

WINTERS, Administrative Patent Judge.

DECISION ON APPEAL

This appeal was taken from the examiner's decision rejecting claims 1-7 and 15-24, which are all of the claims remaining in the application.

REPRESENTATIVE CLAIM

Claim 1, which is illustrative of the subject matter on appeal, reads as follows:

1. Hydroxamic acid polymers comprising hydroxamic groups and carboxylic acid groups, wherein the carboxylic acid groups constitute less than about 3 mole percent of the functional groups.

THE REFERENCES

The prior art references relied on by the examiner are:

Woodberry	2,959,574	Nov. 8, 1960
Vio	4,536,296	Aug. 20, 1985

THE ISSUE

The issues presented for review are: (1) whether the examiner erred in rejecting claims 1-7 and 15-24 under 35 U.S.C. § 112, first and second paragraphs; and (2) whether the examiner erred in rejecting claims 1-7 and 15-24 under 35 U.S.C. § 102 as anticipated by or, in the alternative, under 35 U.S.C. § 103 as unpatentable over Woodberry or Vio.

DELIBERATIONS

Our deliberations in this matter have included evaluation and review of the following materials: (1) the instant specification, including all of the claims on appeal; (2) applicants' Appeal Brief; (3) the Examiner's Answer; (4) the above-cited prior art references; and (5) the

opinion and decision issued by another merits panel of the Board in parent application 07/837,126 (Paper No. 14, Appeal No. 94-0905, mailed February 8, 1994).

On consideration of the record, including the above-listed materials, we reverse the examiner's rejections.

35 U.S.C. § 112, FIRST AND SECOND PARAGRAPHS

Claims 1-7 and 15-24 stand rejected under 35 U.S.C. § 112, first and second paragraphs. According to the examiner, applicants' specification does not contain a written description of the claimed invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same. Further, the examiner argues that applicants' specification does not conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicants regard as their invention.

In the Examiner's Answer, page 4, lines 2-6, the examiner explains the rejection as follows:

The portion of specification at page 7, lines 3, 4 does not support about 3 mole percent, that portion is not defined and cannot be arbitrarily assigned this value.

On page 12, only a specific polymer appears to possess "3 molar percent" only.

Having reviewed the above-quoted passage, we are at a loss to understand why the examiner believes that claims 1-7 and 15-24 do not comply with the statute. The examiner's reasoning is incomprehensible; does not establish a prima facie case of indefiniteness (35 U.S.C. § 112, second paragraph); does not establish a prima facie case of failure to comply with the written description or enablement requirements (35 U.S.C. § 112, first paragraph); and, in our judgment, does not rise to the level of superficial plausibility.

The rejection of claims 1-7 and 15-24 under 35 U.S.C. § 112, first and second paragraphs, is reversed.

35 U.S.C. § 102/103

Turning to the prior art rejections, we first note that the subject matter of this appeal was previously before the Board in parent application 07/837,126. In the parent application, another merits panel affirmed the rejection of all the appealed claims under 35 U.S.C. § 102 as anticipated by or, in the alternative, under 35 U.S.C. § 103 as unpatentable over the same references cited by the examiner in this case. See Paper No. 14 of the parent file (Appeal No. 94-0905, mailed February 8, 1994). We here reproduce claim 1, which was subject to review in the parent application:

1. Hydroxamic acid polymers comprising hydroxamic groups and carboxylic acid groups, wherein the carboxylic acid groups constitute less than about 15% of the functional groups. [emphasis added].

It can be seen that claim 1 in the parent application and claim 1 before us are the same in all respects except that the latter imposes a more severe restriction on the carboxylic acid content of the claimed hydroxamic acid polymers. That is, claim 1 before us requires that “the carboxylic acid groups constitutes less than about 3 mole percent of the functional groups” of the claimed hydroxamic acid polymers whereas claim 1 in the parent application required that “the carboxylic acid groups constitute less than about 15% of the functional groups” of the claimed hydroxamic acid polymers. Claim 1 in the parent application was broader and, therefore, more vulnerable to a prior art rejection, compared with claim 1 before us.¹ As will become apparent in the ensuing discussion, the claim language requiring “less than about 3 mole percent” carboxylic acid functional groups in applicants' hydroxamic acid polymers constitutes the salient limitation in the claims before us and serves to patentably distinguish over the cited prior art.

For a prior art reference to anticipate in terms of 35 U.S.C. § 102, every element of the claimed invention must be identically shown in a single reference. Diversitech Corp. v. Century Steps, Inc., 850 F.2d 675, 677, 7 USPQ2d 1315, 1317 (Fed. Cir. 1988).

Here, the examiner has not established that Woodberry describes hydroxamic acid polymers having “less than about 3 mole percent” of carboxylic acid functional groups, a requirement of every independent claim on appeal. The examiner does not point to any portion of Woodberry

¹ Every independent claim before us (1, 15, 18, 21, and 23) requires that applicants' hydroxamic acid polymers or polymeric material have less than about 3 mole percent carboxylic acid functional groups.

describing polymers having that restriction on the carboxylic acid content. Nor does the examiner show sound basis for believing that the products of the applicants and the prior art are the same. The working examples of Woodberry are carried out at relatively high temperatures and relatively low pH values, and the examiner has not established that those examples reasonably appear to prepare products which are the same as those recited in the appealed claims.

The Woodberry process could be modified by selecting relatively low temperatures, for example, room temperature, and relatively high pH values, for example, pH of 8, per the generic teachings in column 2, lines 22-44, of the reference. However, the mere fact that the prior art could be so modified would not have made the modification obvious unless the prior art suggested the desirability of the modification. In re Gordon, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984). That is not the case here. On this record, the reason, suggestion, or motivation to use “mild conditions” during hydroxamic acid formation stems from applicants' specification, not the cited prior art. As explained in the specification, using “mild conditions” minimizes hydrolysis and gives rise to products having a low carboxylic acid content (specification, page 12, lines 22-25).

The rejection of claims 1-7 and 15-24 under 35 U.S.C. § 102 as anticipated by or, in the alternative, under 35 U.S.C. § 103 as unpatentable over Woodberry, is reversed.

With respect to the Vio reference, again, the examiner has not established that Vio describes hydroxamic acid polymers having “less than about 3 mole percent” of carboxylic acid functional groups. The examiner does not point to any portion of Vio describing polymers having that restriction on the carboxylic acid content. Nor does the examiner show sound basis for believing that the products of the applicants and the prior art are the same. On the contrary, the Ryles Affidavit of record, executed March 28, 1994, establishes that representative working examples carried out per the teachings of Vio do not prepare products having the low carboxylic acid content required by applicants' claims.

We have not overlooked the broader portions of Vio, disclosing polymers or copolymers of low molecular weight having functional groups where from about 2 to 95% of the functional groups are hydroxamic or thiohydroxamic groups. For example, see Vio, column 2, lines 12-18. In other words, the Vio reference, in its broader provisions, discloses polymeric products characterized by a relatively high content (up to 95%) of hydroxamic acid groups. Nevertheless, on this record, the examiner has not established that Vio discloses or suggests hydroxamic acid polymers having less than about 3 mole percent carboxylic acid functional groups.

The rejection of claims 1-7 and 15-24 under 35 U.S.C. § 102 as anticipated by or, in the alternative, under 35 U.S.C. § 103 as unpatentable over Vio is reversed.

CONCLUSION

In conclusion, we do not sustain the examiner's rejection of claims 1-7 and 15-24 under 35 U.S.C. § 112, first and second paragraphs. Nor do we sustain the examiner's rejection of claims 1-7 and 15-24 under 35 U.S.C. § 102 as anticipated by or, in the alternative, under 35 U.S.C. § 103 as unpatentable over Woodberry or Vio.

The examiner's decision is reversed.

REVERSED

Sherman D. Winters)	
Administrative Patent Judge)	
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William F. Smith)	BOARD OF PATENT
Administrative Patent Judge)	APPEALS AND
)	INTERFERENCES
)	
Douglas W. Robinson)	
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